IN THE CLAIMS

Please amend the claims as follows:

Claim 1-3 (Canceled).

Claim 4 (Withdrawn): A method according to claim 1, further comprising predicting motion of the object on the basis of a feature amount of the object extracted from the captured range image.

Claim 5 and 6 (Canceled).

Claim 7 (Withdrawn): A method according to claim 1, further comprising the step of compressing a range image captured by an image capture unit on the basis of the recognized motion of the object.

Claim 8-15 (Canceled).

Claim 16 (Withdrawn): An apparatus according to claim 9, further comprising:

a feature amount extraction unit configured to extract a feature amount of the object from the range image captured by said image capture unit; and

a prediction unit configured to predict motion of the object on the basis of the feature amount extracted by said feature amount extraction unit.

Claims 17-22 (Canceled).

Claim 23 (Withdrawn): An apparatus according to claim 9, further comprising:

an image compression unit configured to compress the range image captured by said image capture unit on the basis of the recognized motion of the object.

Claims 24-37 (Canceled).

Claim 38 (Currently Amended): An image recognition method ~~according to claim 1, further comprising~~ for recognizing an object, comprising:

capturing the object to generate a range image having three-dimensional information representing a three-dimensional shape of the object;

generating a three-dimensional deformed image by three-dimensionally deforming the range image;

recognizing three-dimensional motion of the object in the range image by comparing the deformed image with a newly captured range image obtained by capturing the object currently; and

segmenting the range image of the object in units of voxels according to a distance value of the range image,

wherein the deformed image is generated by deforming the range image based on a position of the voxel.

Claim 39 (Canceled).

Claim 40 (Currently Amended): An image recognition apparatus ~~according to claim 9, further comprising~~ to recognize an object, comprising:

an image capture unit configured to capture the object to generate a range image having three-dimensional information representing the object;

an image deformation unit configured to three-dimensionally deform the range image;

a recognition unit configured to recognize three-dimensional motion of an object by comparing a three-dimensionally deformed image obtained by said image deformation unit with a new range image captured by said image capture unit; and

a segmentation unit configured to segment the range image of the object in units of voxels according to a distance value of the range image,

wherein the deformation unit is configured to three-dimensionally deform the range image based on a position of the voxel.

Claim 41 (Canceled).

Claim 42 (Currently Amended): An article of manufacture ~~according to claim 27, further includes~~ comprised of a computer-usable medium having computer-readable program code means that implements computer-readable program code means for recognizing an object, comprising:

computer-readable program code means for making a computer generate a range image having three-dimensional information representing a three-dimensional shape of the object;

computer-readable program code means for making the computer three-dimensionally deform the range image to generate a deformed image;

computer-readable program code means for making the computer recognize three-dimensional motion of the object by comparing the deformed image with a new range image generated currently; and

computer-readable program code means for making the computer segment the range image of the object in units of voxels according to a distance value of the range image,

wherein the deformed image is generated by deforming the range image based on a position of the voxel.

Claim 43 (Canceled).